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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,828	02/28/2002	Yuji Harada	KOJIM-449	3034

23599 7590 09/15/2003

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EXAMINER

THORNTON, YVETTE C

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

10/084,828

Applicant(s)

HARADA ET AL.

Examiner

Yvette C. Thornton

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-- The MAILING DATE of this c mmunicati n appears on the c ver sheet with the corresp ndence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2002 .
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☒ Claim(s) 2 and 5-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_ .

### DETAILED ACTION

This is written in reference to application number 10/084828 filed on February 28, 2002 and published as US 2003/0008231 A1 on January 9, 2003.

#### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### *Information Disclosure Statement*

2. The Information Disclosure Statement filed on February 28, 2002 has been entered and fully considered.

#### *Response to Amendment*

3. The preliminary amendment to instant claim 5 has been entered and fully considered.

#### *Claim Rejections - 35 USC § 112-First Paragraph*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a compound having the general formulae (2-1) to (2-5) wherein R<sub>O</sub> is selected from a group of formula (1) or a group of formula (1a), does not reasonably provide enablement for a compound having a C(=O)-O-(C=O)-O bond as would be present from the combination of formula (2-1) to (2-5) and formula (1) or (1a). The specification does not enable any person skilled in the art to which it pertains, or with which it is most

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nearly connected, to make the invention commensurate in scope with these claims. The present specification fails to teach and or disclose how to make a compound having a C(=O)-O-(C=O)-O bond as would be required by claim 3. Furthermore, no such compounds are exemplified.

***Claim Rejections - 35 USC § 112-Second Paragraph***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner if the applicant intends to claim a compound wherein the claimed polymer has a C(=O)-O-(C=O)-O bond as set forth in instant claim 3. The present specification fails to exemplify any compounds having such a bond. Clarification is requested.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bonafini, Jr. (US 5923397 A). Bonafini teaches a bimodulus contact lens article comprising an edge section having a crosslinked composition polymerized from a monomer mix including at least 15

weight % of monomers represented by formula I. Bonafini teaches that the said edge section may also include fluoroalkylmethacrylate or fluoroalkyl itaconate monomers. Examples include hexafluoroisopropyl methacrylate, nonafluorocyclohexyl acrylate and 1,1-dihydroperfluorooctyl methacrylate (c. 5, l. 63-c. 6, l. 12). It is the examiner's position that the use of nonafluorocyclohexyl acrylate in the taught monomer mix meets the limitations of instant claim 1 wherein R1 is hydrogen, a=0, R2-7 are each fluorine.

10. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ratkowski et al. (US 4661573 A). Ratkowski teaches a composition comprising in weight percent from 3-35% polyfluoroalkyl acrylate; from 45-65% acryloxyalkylpolysiloxane; from 1-15% acryloxyalkylsilanol; 2-20% polyacryloxyalkylpolysiloxane; 2-15% polyol polyacrylate; and 2-15% polymerizable ethylenically unsaturated monomeric wetting agent such as acrylic acid. The taught composition may also contain 2% of a free radical initiator (abstract). Suitable examples of the taught fluoroalkyl acrylates include nonafluorocyclohexyl acrylate which meets the limitations of claimed formula (1) wherein R1 is hydrogen, a=0, R2-7 are each fluorine.

***Allowable Subject Matter***

11. Claims 2 and 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: review of the prior art failed to teach and/or suggest (1) a polymer containing a group represented by claimed formula (1a); (2) a chemically amplified positive composition

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comprising a polymer containing a monomer of claimed formula (1) in combination with an organic solvent and a photoacid generator; and (3) a process wherein the said composition is applied to a substrate, exposed and developed to form a positive pattern.

*Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Suyal et al. (US 2003/0114619 A1) which teaches photopolymers and their use thereof.
- Ogata et al. (US 2002/0115883 A1) pertaining to novel fluorine containing monomeric ester compounds for base resin in photoresists compositions. (See p.0027)
- Harada et al. (US 2002/0161148 A1) pertaining to polymers, resist compositions and patterning process (see p. 0017). Harada however is not "to another" as required by 35 USC 102(e).
- Harada et al. (US 6582880 B2) pertaining to polymers, resist compositions and patterning process (see c. 3, l. 1-c. 2, l. 12). Harada however is not "to another" as required by 35 USC 102(e).
- Stacey et al. (US 6369179 B1) pertaining to 2-fluoroacrylate ester polymers and use thereof as optical materials.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvette C. Thornton whose telephone number is 703-305-0589. The examiner can normally be reached on Monday-Thursday 8-6:30.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet C. Baxter can be reached on 703-308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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15. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1495.

A handwritten signature in black ink, appearing to read "Yvette C. Thornton". The signature is fluid and cursive, with the first name "Yvette" being more prominent and the last name "Thornton" written in a more compact, stylized manner.

Yvette Clarke Thornton  
Junior Examiner  
Art Unit 1752

yct  
September 9, 2003